

UTAH NATIONAL GUARD – CAMP WILLIAMS

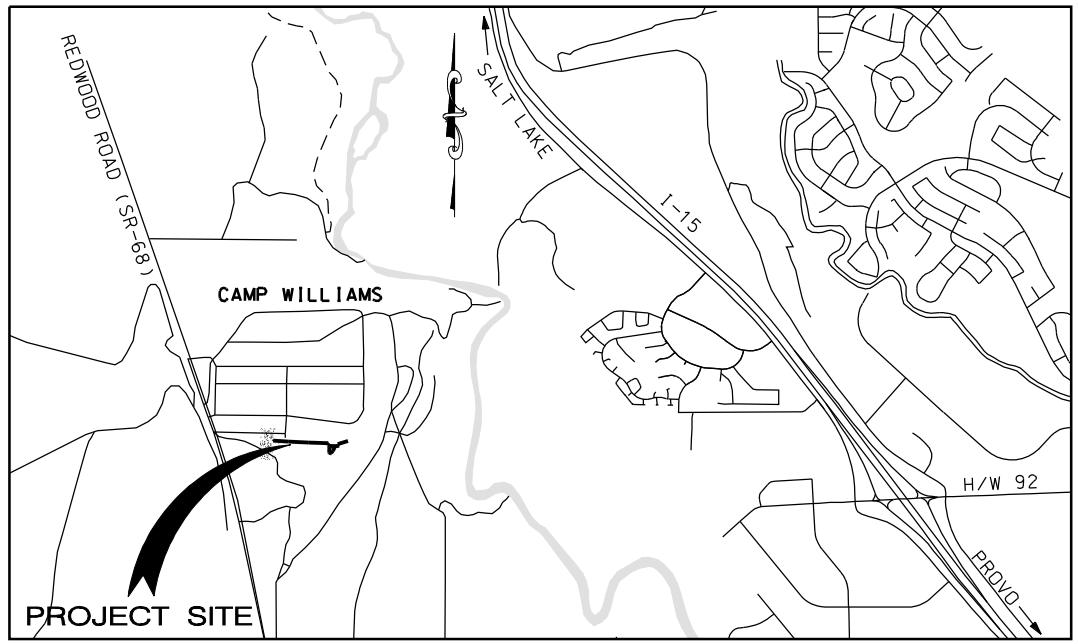
**SOUTH STORM DRAIN
BASE BID**

DFCM PROJECT NO. 06194480

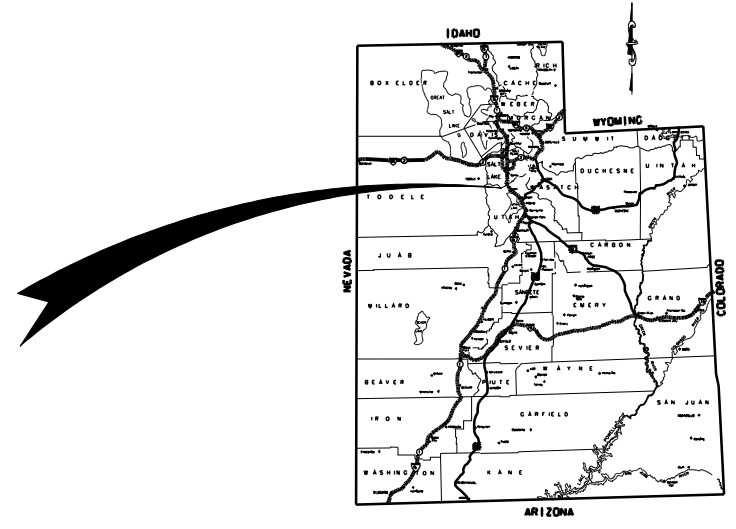
APRIL 2007

SHEET INDEX

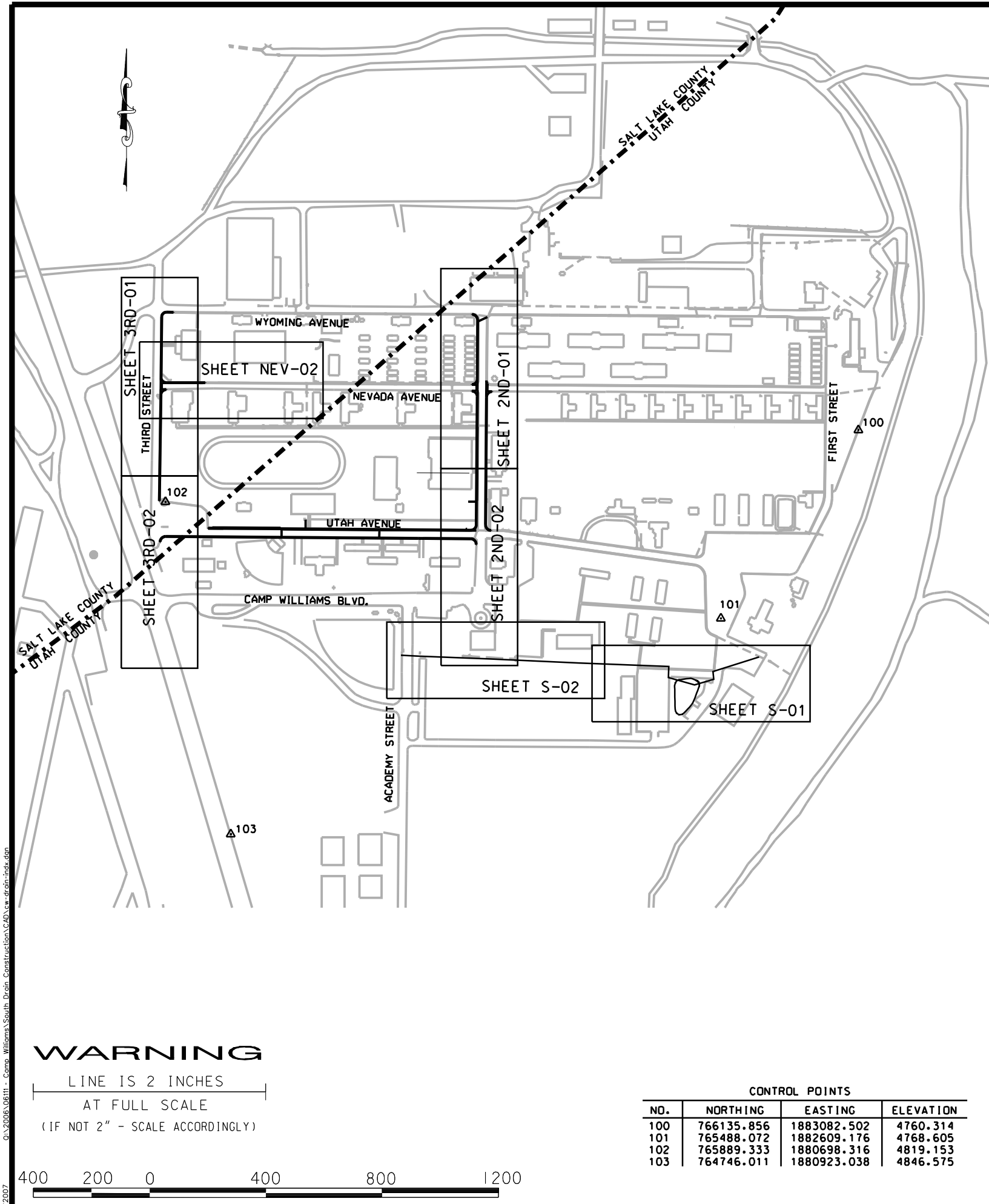
<u>SHEET</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	INDEX SHEET
S-01 TO S-02	PLAN AND PROFILE SHEETS
DT-1 TO DT-2	DETAIL SHEETS



VICINITY MAP



ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
3160 West Clubhouse Drive
Lehi, UT 84043
(801) 768-7200
(801) 768-7201 (FAX)
CONTACT: JAY MEACHAM
PROJECT NO. 06111.00



PROJECT NOTES:

1. FOR ANY QUESTIONS DEALING WITH CAMP APPROVALS, SCHEDULING, OR PERMITS CONTACT KENT BARLOW (801-253-5427). FOR UTILITY QUESTIONS AND SHUTDOWNS CONTACT MIKE OSBORN (801-716-9049).
2. CONTRACTOR WILL BE SOLELY RESPONSIBLE TO PROVIDE ADEQUATE MEASURES TO CONTROL AND MAINTAIN ALL STORM WATER WITHIN PROJECT LIMITS DURING CONSTRUCTION. THIS WILL INCLUDE ALL BEST MANAGEMENT PRACTICES FOR THE CONTROL OF EROSION AND PROTECTION OR CONTROL OF RUNOFF PRIOR TO ENTERING ANY STORM DRAINAGE PIPE SYSTEM OR LEAVING THE CONSTRUCTION SITE.
3. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
4. EXISTING UTILITIES ARE LOCATED ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. EXISTING UTILITIES WHERE SHOWN MAY NOT BE COMPLETE AND ARE TO BE VERIFIED BEFORE CONSTRUCTION. BLUE STAKING TO BE PERFORMED BY CAMP PERSONNEL UPON 48 HOUR NOTICE BY CONTRACTOR. CONTRACTOR TO POTHOLE EXISTING UTILITIES AND VERIFY PIPE CLEARANCE PRIOR TO CONSTRUCTION. CONTRACTOR TO SUBMIT CUT SHEETS AFTER POT HOLING FOR APPROVAL 5 WORKING DAYS BEFORE CONSTRUCTION. AFTER SUBMITTED, THE ENGINEER MAY APPROVE MINOR ADJUSTMENTS TO PIPE SLOPES TO MINIMIZE IMPACT TO EXISTING UTILITIES.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.
6. ROADWAY CROSS SLOPES WILL BE THOSE SHOWN ON THE PLANS AND WILL BEGIN AT THE ROADWAY EDGE CONTROL (CURB & GUTTER, VALLEY GUTTER, STEM WALL, OR ASPHALT) AND PROJECT TO THE ROADWAY CENTERLINE.
7. AC PAVEMENT TO BE ONE-HALF INCH (1/2) ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
8. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
9. WORK WITHIN A SPECIFIC AREA OR STREET, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO THE CAMP.
10. PROTECTION AND REPLACEMENT OF SURVEY MONUMENTS SHALL BE THE CONTRACTORS' RESPONSIBILITY.
11. THE USE OF POTABLE OR SECONDARY WATER WITHOUT APPROVAL FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS FOR CONSTRUCTION WATER THROUGH MIKE OSBORN (801-716-9049).
12. ALL MANHOLES, GRATES, BOXES, AND COVERS TO HAVE H20 LOADING.
13. ALL STORM DRAIN PIPE TO BE CHDPEP PER SPECIFICATIONS.
14. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.

LEGEND

- | | | | |
|---------|-------------------------------|---|------------------------|
| —UP— | Power Buried | ⊙ | Storm Drain Manhole |
| —OP— | Power Overhead | ⊞ | Electrical Transformer |
| ===== | Existing Pipe | ⊞ | Fire Hydrant |
| —X—X—X— | Fence Chain Link | ⊞ | Water Valve |
| —X—X—X— | Fence Wire | ⊞ | Cable Box |
| —X—X—X— | Fence Wood | ⊞ | Sign |
| —G— | Gas Line | ⊞ | Irrigation Valve / Box |
| —IR— | Pressure Irrigation | ⊞ | Sump |
| —SS— | Sanitary Sewer | ⊞ | Telephone Pedestal |
| ----- | Pavement Marking (Skip) | ⊞ | Telephone Manhole |
| ----- | Pavement Marking (Skip Solid) | ⊞ | Water Meter |
| —SD— | Storm Drain | ✓ | Guy Wire |
| ----- | Stream or Ditch | ⊞ | Power Pole |
| —BT— | Telephone Buried | ⊞ | Mailbox |
| —T— | FIBEROPTIC | ⊞ | Sewer Manhole |
| ----- | Tree Line | ⊞ | Water Manhole |
| ----- | Wall Block Exist | ⊞ | Survey Control Point |
| —w— | Water Line | ⊞ | Storm Drain Inlet |
| —CTV— | Cable / Tele | | |

WARNING
LINE IS 2 INCHES
AT FULL SCALE
(IF NOT 2" - SCALE ACCORDINGLY)

CONTROL POINTS			
NO.	NORTHING	EASTING	ELEVATION
100	766135.856	1883082.502	4760.314
101	765488.072	1882609.176	4768.605
102	765889.333	1880698.316	4819.153
103	764746.011	1880923.038	4846.575

AS SHOWN
GP
JFM
RME
JULY 06
06111.00

SCALE
DRAWN
CHECKED
APPROVED
DATE
PROJECT NO.

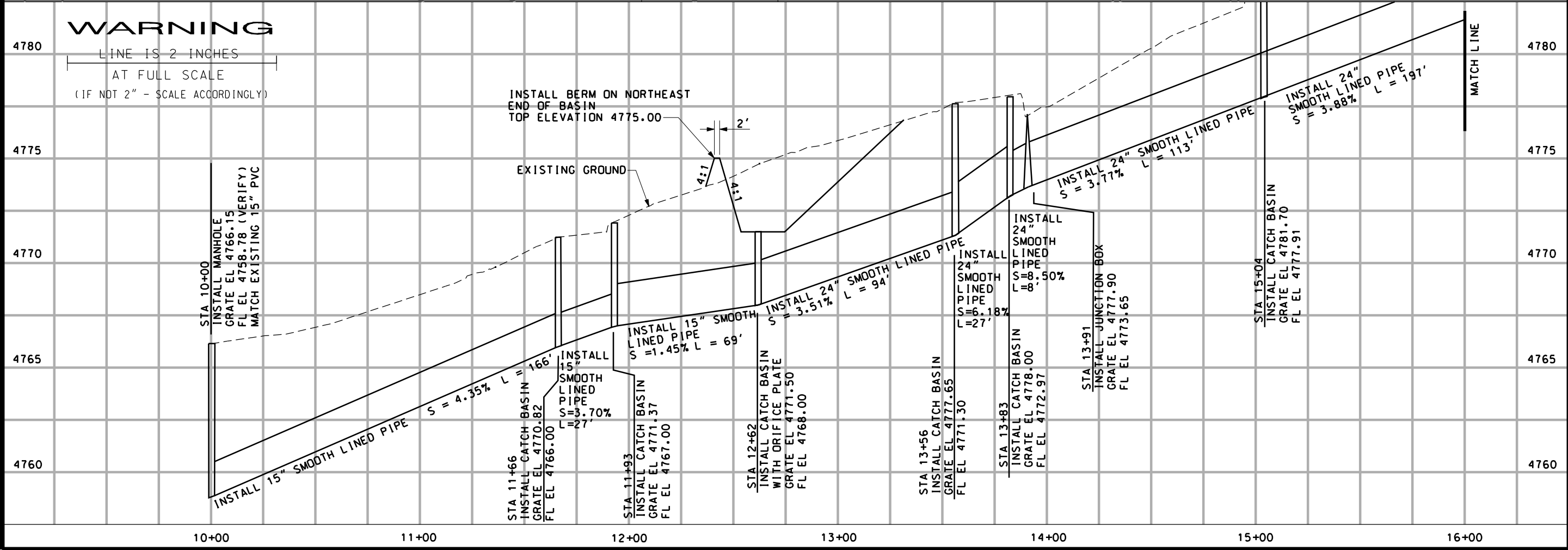
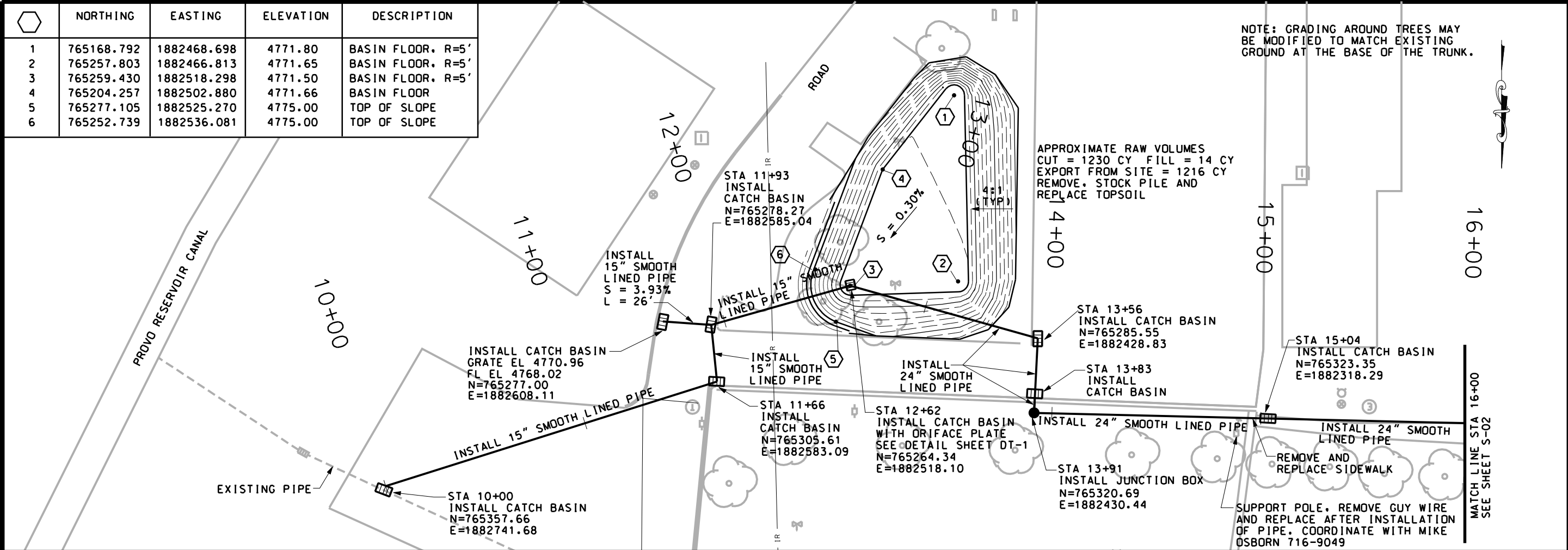
THIS DRAWING IS THE PROPERTY OF CIVIL SCIENCE AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AGREEMENT OF CIVIL SCIENCE COMPANY.

CIVIL SCIENCE
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
768 East Utah Valley Drive
American Fork, UT 84003
(801) 756-8888

UTAH NATIONAL GUARD - CAMP WILLIAMS
SOUTH STORM DRAIN
BASE BID
INDEX

UTAH
COUNTY
SHEET NO. 2

	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	765168.792	1882468.698	4771.80	BASIN FLOOR, R=5'
2	765257.803	1882466.813	4771.65	BASIN FLOOR, R=5'
3	765259.430	1882518.298	4771.50	BASIN FLOOR, R=5'
4	765204.257	1882502.880	4771.66	BASIN FLOOR
5	765277.105	1882525.270	4775.00	TOP OF SLOPE
6	765252.739	1882536.081	4775.00	TOP OF SLOPE



1" = 50'

SCALE

DRAWN

CHECKED

APPROVED

DATE

PROJECT NO.

GP

JFM

RME

JULY 06

06111.00

THIS DRAWING IS THE PROPERTY OF CIVIL SCIENCE ENGINEERS AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AGREEMENT WITH SAID COMPANY.

CIVIL SCIENCE

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS

788 East Utah Valley Blvd., Suite 84003

Amery, UT 84003

(801) 756-8888

UTAH NATIONAL GUARD - CAMP WILLIAMS

SOUTH STORM DRAIN

BASE BID

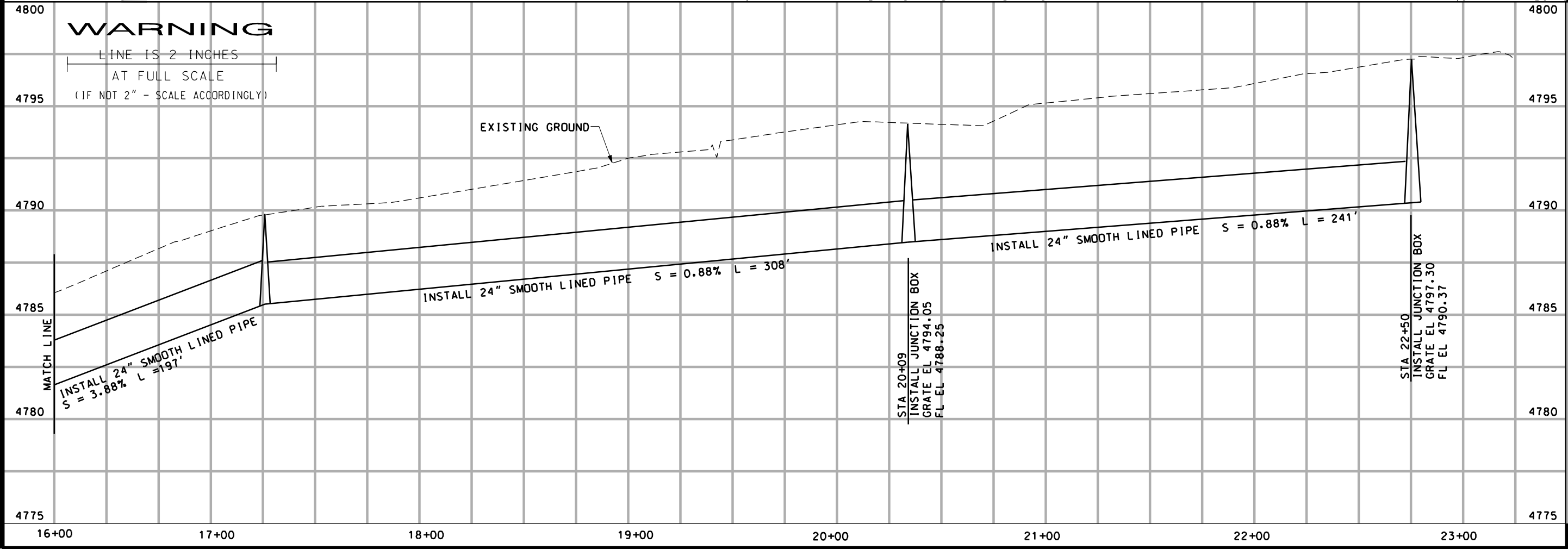
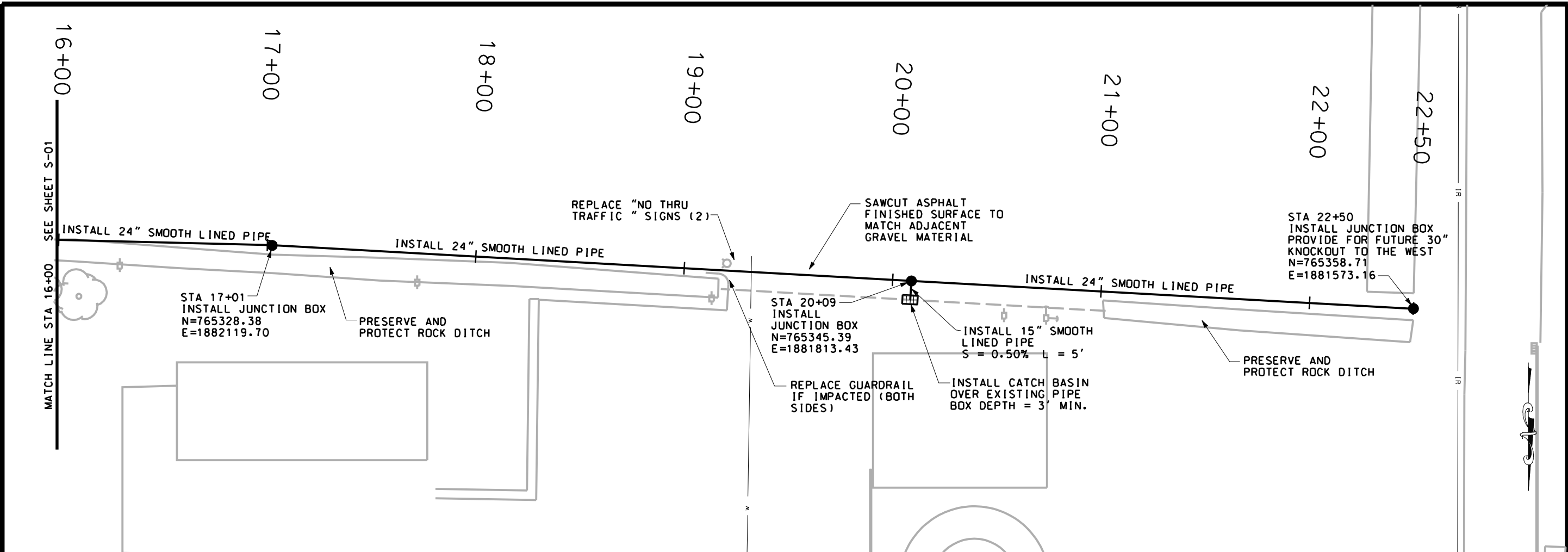
PLAN & PROFILE SHEET

UTAH COUNTY

SHEET NO. S-01

4/17/2007 G:\2006\06111 - Camp Williams\South Drain Construction\CAD\view\southstd03.dgn

4/17/2007 g:\2006\06111 - Camp Williams\South Drain Construction\CAD\view\souths04.dgn



1" = 50'	
SCALE	GP
DRAWN	JFM
CHECKED	RME
APPROVED	JULY 06
DATE	06111.00
PROJECT NO.	

THIS DRAWING IS THE PROPERTY OF CIVIL SCIENCE AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AGREEMENT WITH SAID COMPANY.

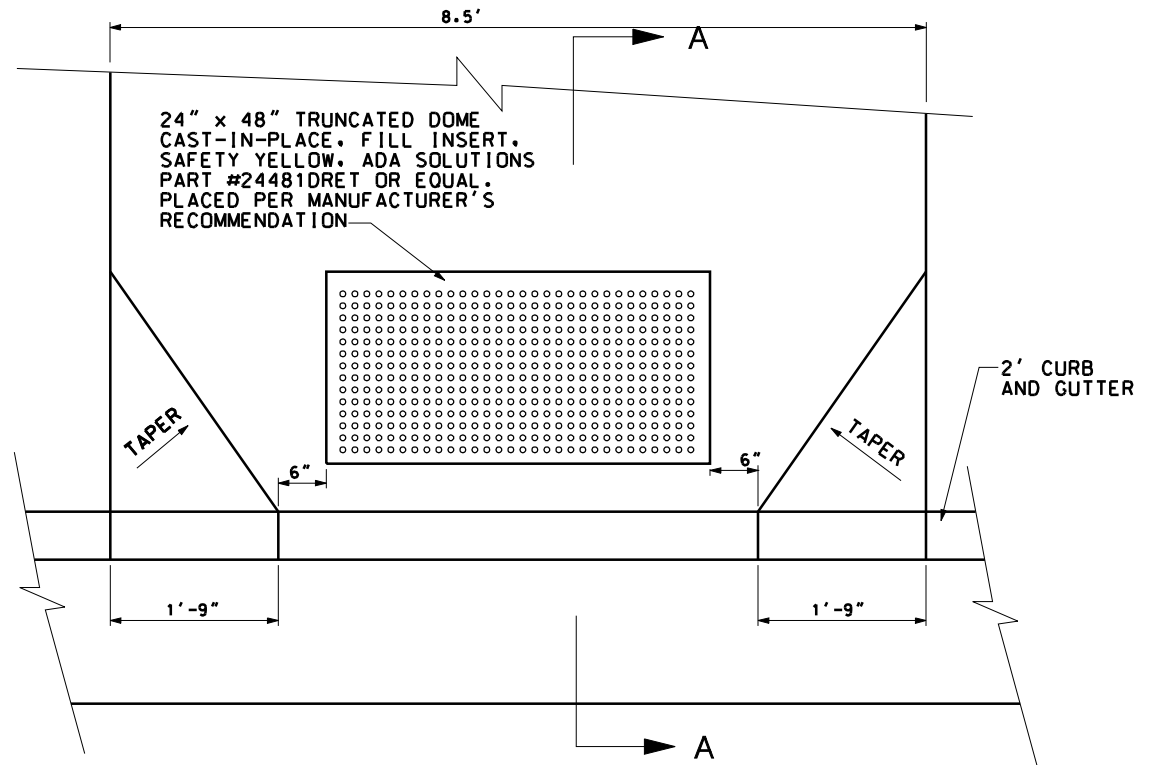
CIVIL SCIENCE
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
788 East Utah Valley Parkway
American Fork, UT 84003
(801) 756-8888

UTAH NATIONAL GUARD - CAMP WILLIAMS
SOUTH STORM DRAIN
BASE BID

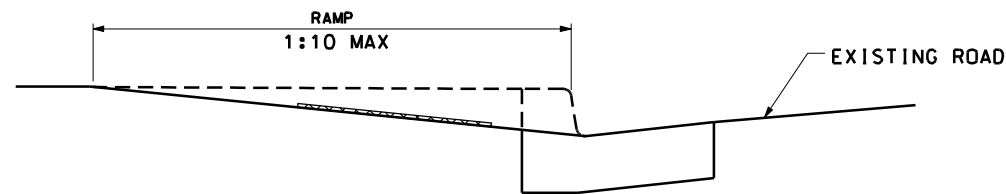
PLAN & PROFILE SHEET

UTAH COUNTY

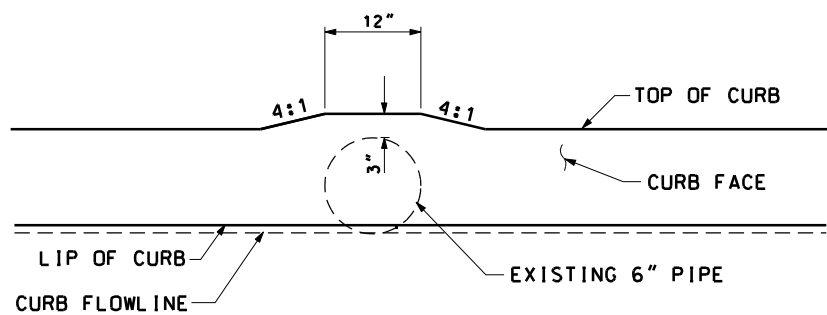
SHEET NO. S-02



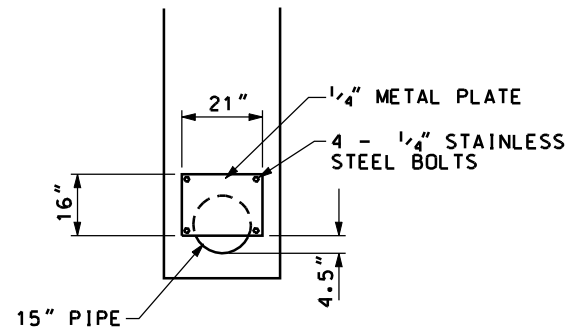
ADA RAMP DETAIL – PLAN
SECOND STREET – STA 16+55



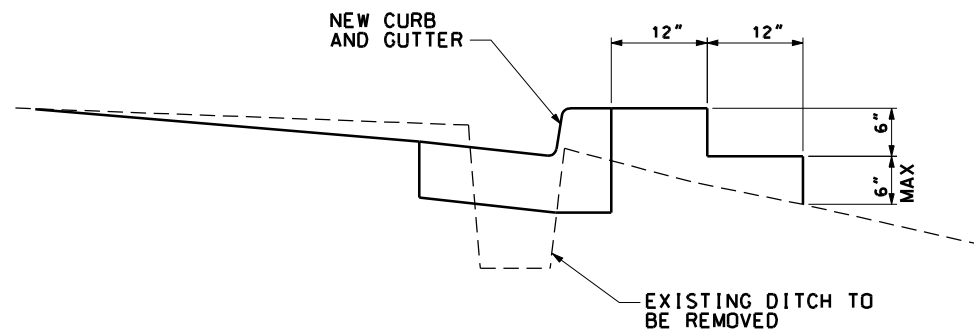
ADA RAMP – SECTION A-A



6" PIPE PENETRATION
SECOND STREET – STA 15+85



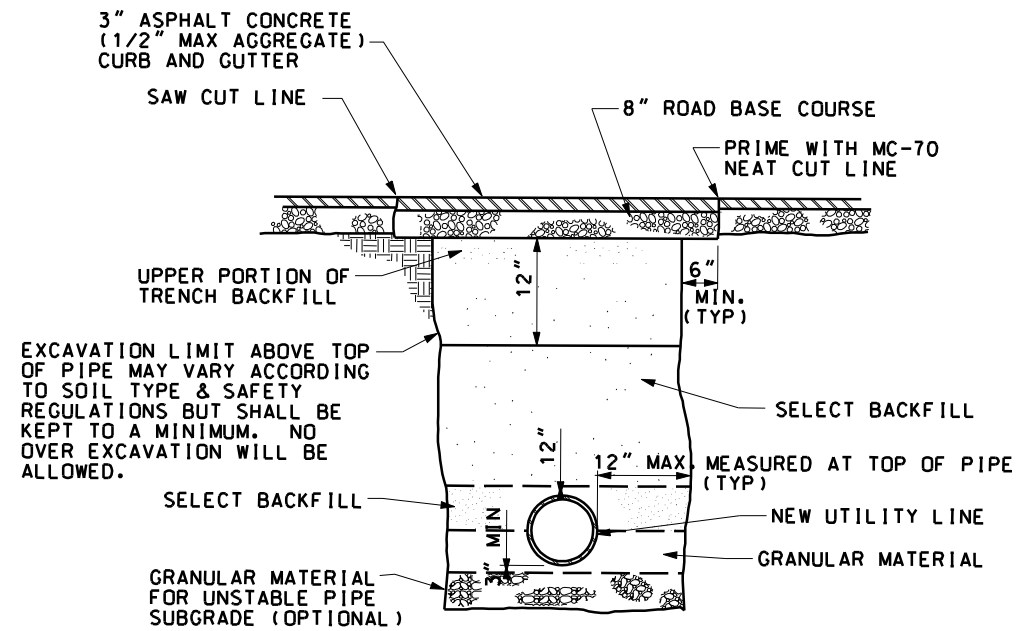
ORIFICE PLATE
(OUTLET END OF CATCH BASIN)
SOUTH STORM DRAIN



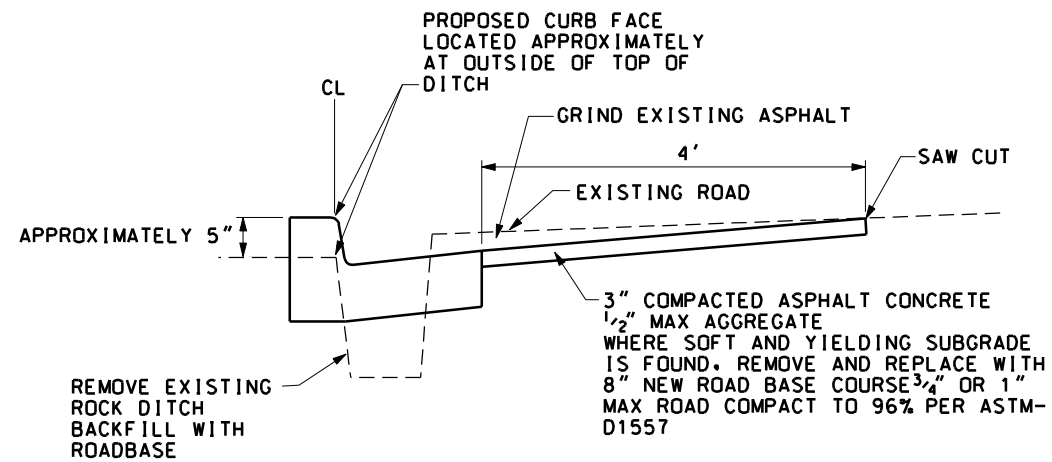
CONCRETE STEPS
THIRD STREET – STA 11+26

NOTES:

1. ALL CATCH BASINS TO BE CONCRETE WITH MINIMUM INSIDE DIMENSIONS OF 2' x 3'
2. CURB INLETS USE D&L SUPPLY I-3517 OR APPROVED EQUAL
3. INLETS NOT ON CURB USE D&L SUPPLY I-3534 AND I-3536 OR APPROVED EQUAL
4. JUNCTION BOXES TO BE GENEVA 3x3 CONCRETE CATCH BASIN OR EQUAL.
5. JUNCTION BOXES USE CONCRETE LID WITH D&L E-1926 (OR APPROVED EQUAL) LID AND COVER.
6. CONTRACTOR TO REPAIR DAMAGED SPRINKLER BEHIND CURB AND GUTTER. FILL BEHIND NEW CURB WITH TOPSOIL AND SOD WHERE IMPACTS EXCEED FOUR INCHES
7. WHERE EXISTING SIDEWALKS APPROACH CURB, REMOVE SIDEWALK BACK TO FIRST JOINT AND REPLACE MATCH CURB.
8. FOR CURB CUTS TO DRIVEWAYS, REMOVE 4' (MIN) ASPHALT AND REPLACE SLOPING TO CURB.

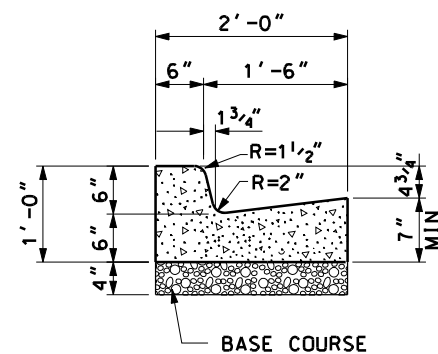


UTILITY INSTALLATION AND ROAD REPAIR

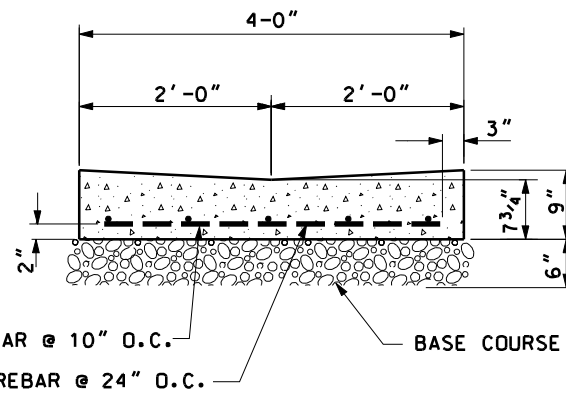


CONCRETE CURB & GUTTER

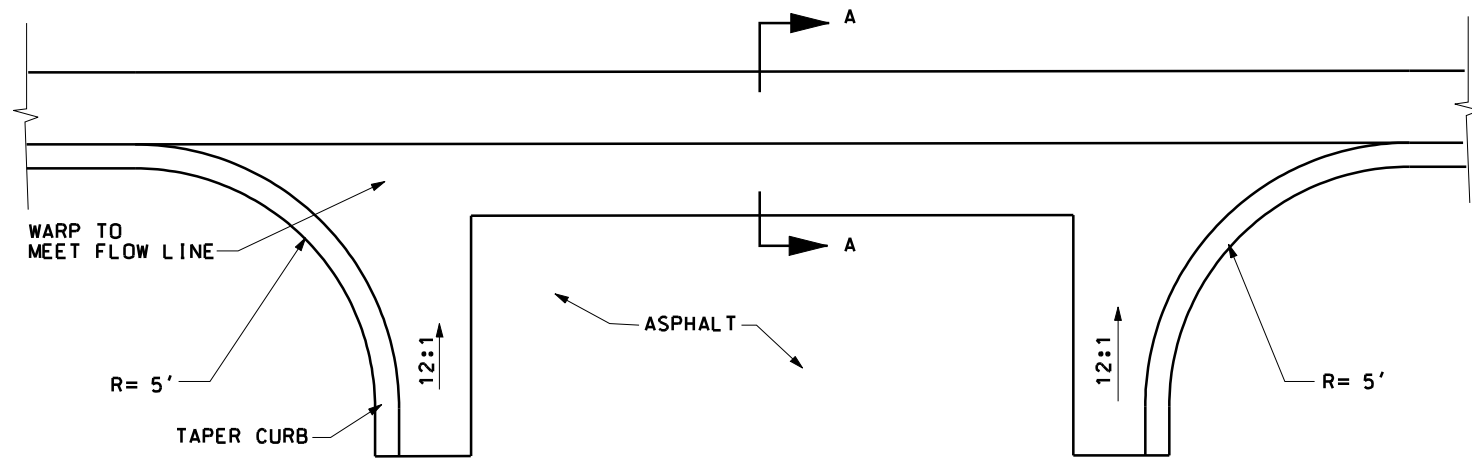
NOTE: WHERE PIPE IS UNDER CURB AND GUTTER MATCH TRENCH DETAIL UNDER THE BASE COURSE



CURB & GUTTER

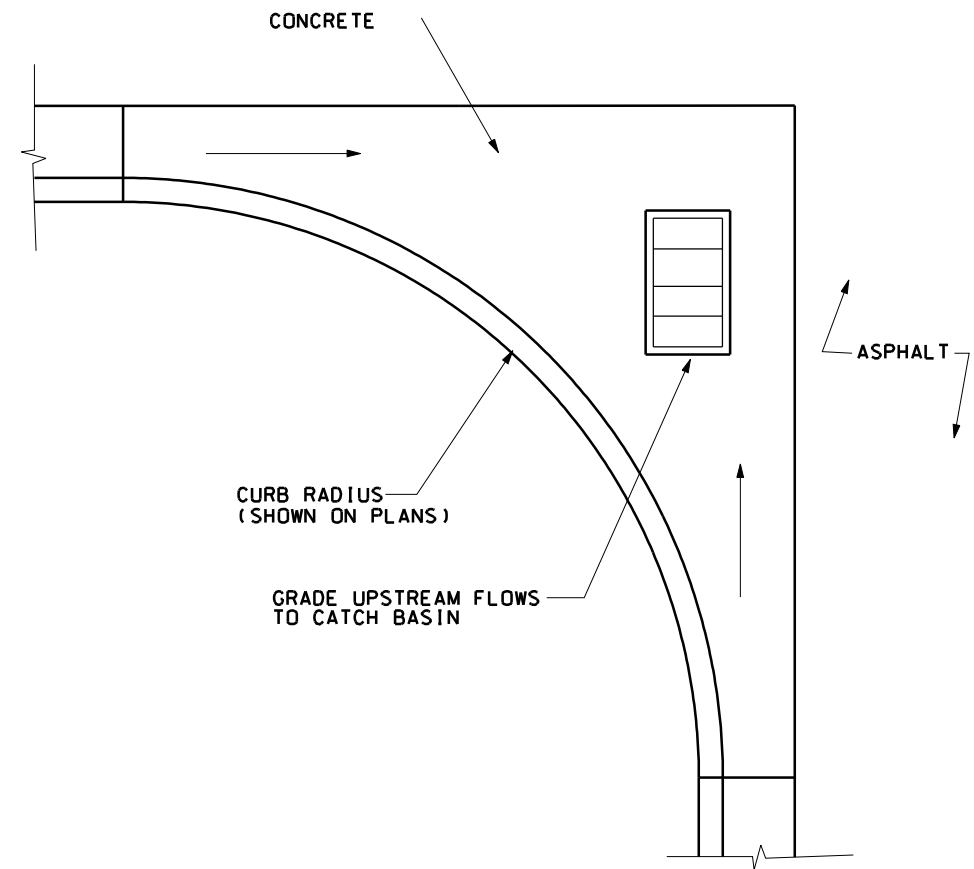


CROSS GUTTER DETAIL SECTION A-A



CROSS GUTTER INTERSECTION DETAIL

NEVADA AVE / SECOND STREET -WEST
NEVADA AVE / SECOND STREET -SOUTHEAST ONLY
NEVADA AVE / THIRD STREET -EAST



CORNER APRON

UTAH AVE / 2nd STREET - NORTHEAST CORNER

UTAH NATIONAL GUARD – CAMP WILLIAMS

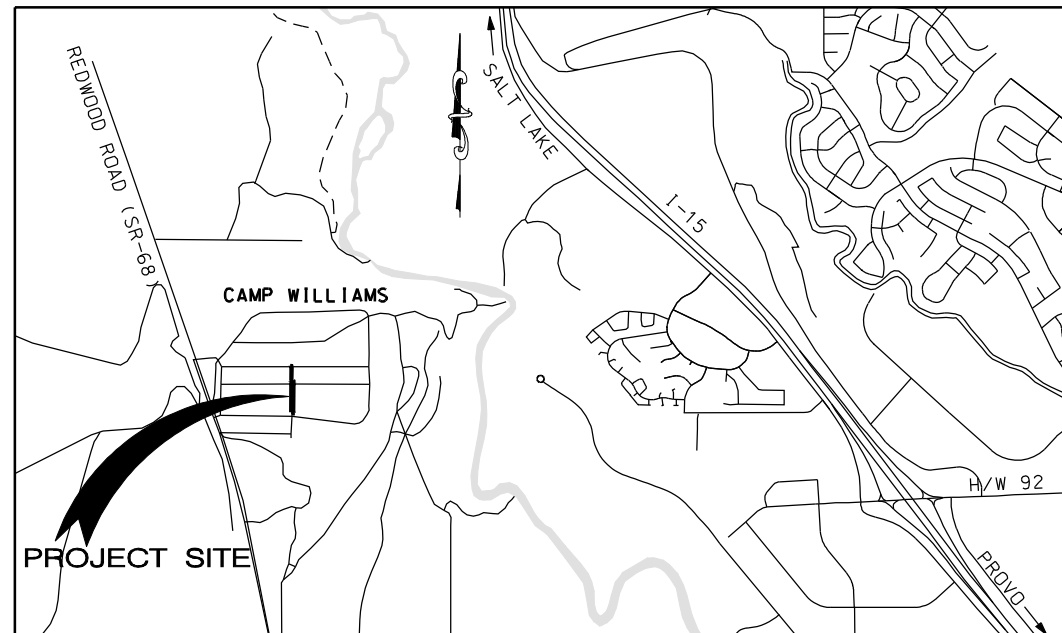
SECOND STREET DRAINAGE FIRST ALTERNATE BID

DFCM PROJECT NO 06194480

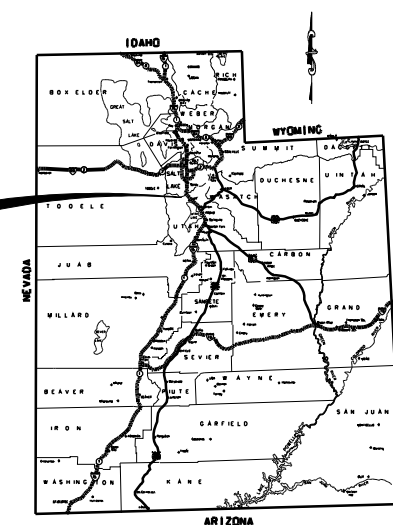
APRIL 2007

SHEET INDEX

<u>SHEET</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2nd-01 TO 2nd-02	PLAN AND PROFILE SHEETS
REFER TO BASE BID SHEETS FOR DETAILS	



VICINITY MAP

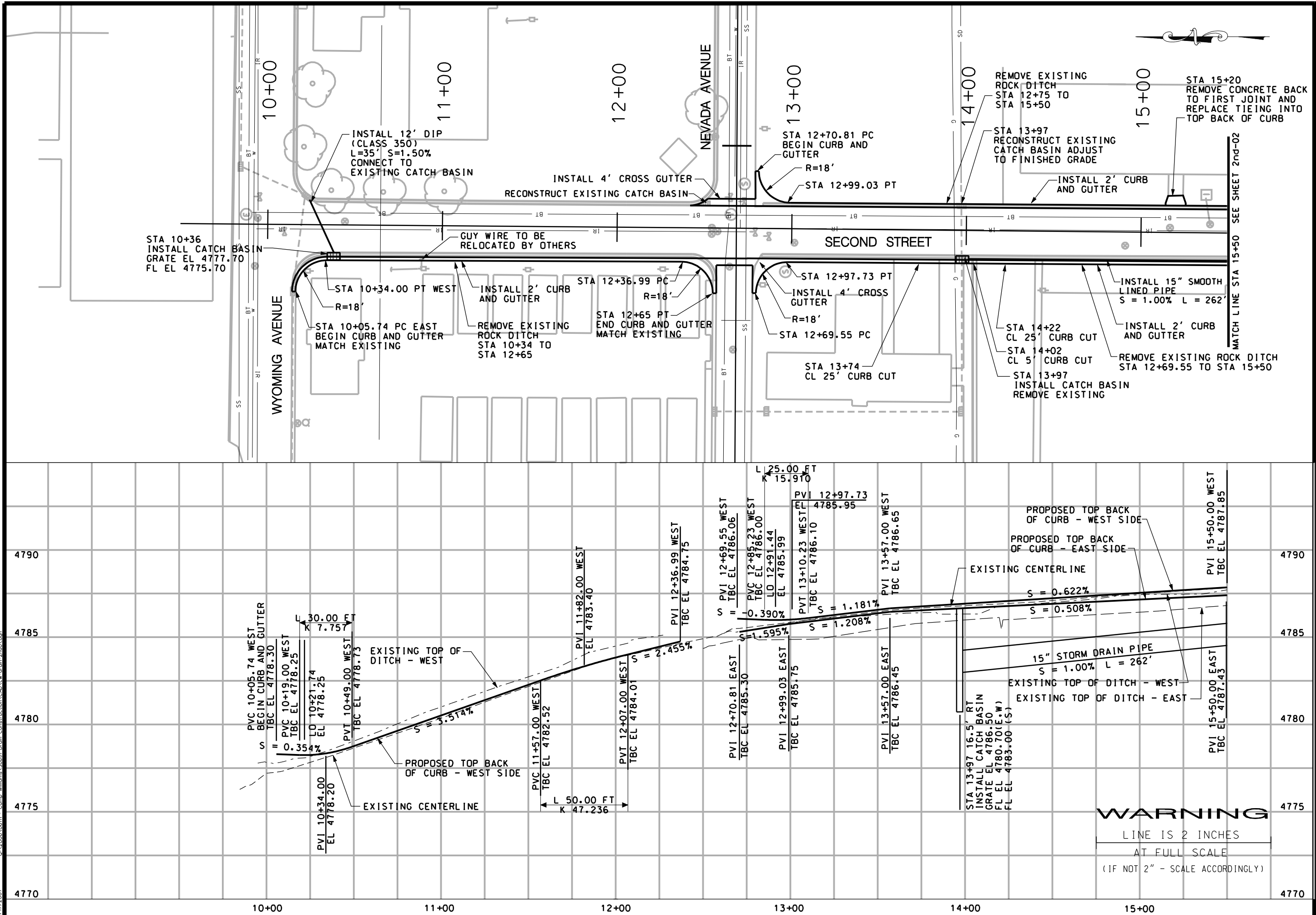


**CIVIL
SCIENCE**

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS

3160 West Clubhouse Drive
Lehi, UT 84043
(801) 768-7200
(801) 768-7201 (FAX)
CONTACT: JAY MEACHAM
PROJECT NO. 06111.00

4/17/2007 g:\2006\06111 - Camp Williams\South Drain Construction\CAD\view.drain-2nd01.dgn



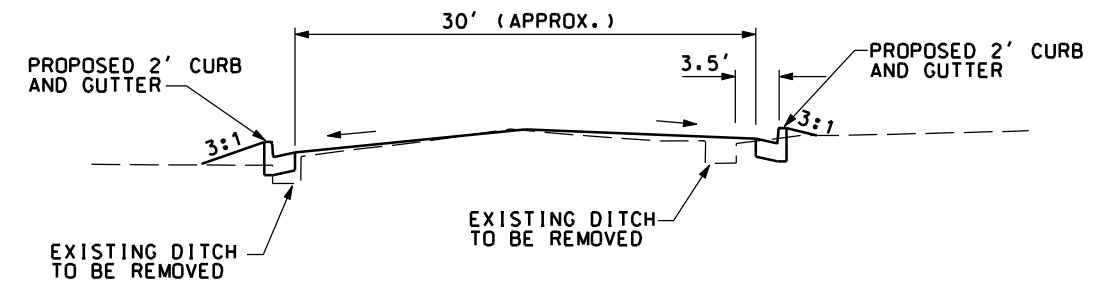
CIVIL SCIENCE
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
3160 West Clubhouse Drive
Lehi, Utah 84043
Tel: (801) 940-9403
Fax: (801) 768-7201

UTAH NATIONAL GUARD - CAMP WILLIAMS
SECOND STREET DRAINAGE
FIRST ALTERNATE BID
SECOND STREET
PLAN & PROFILE SHEET

UTAH
COUNTY

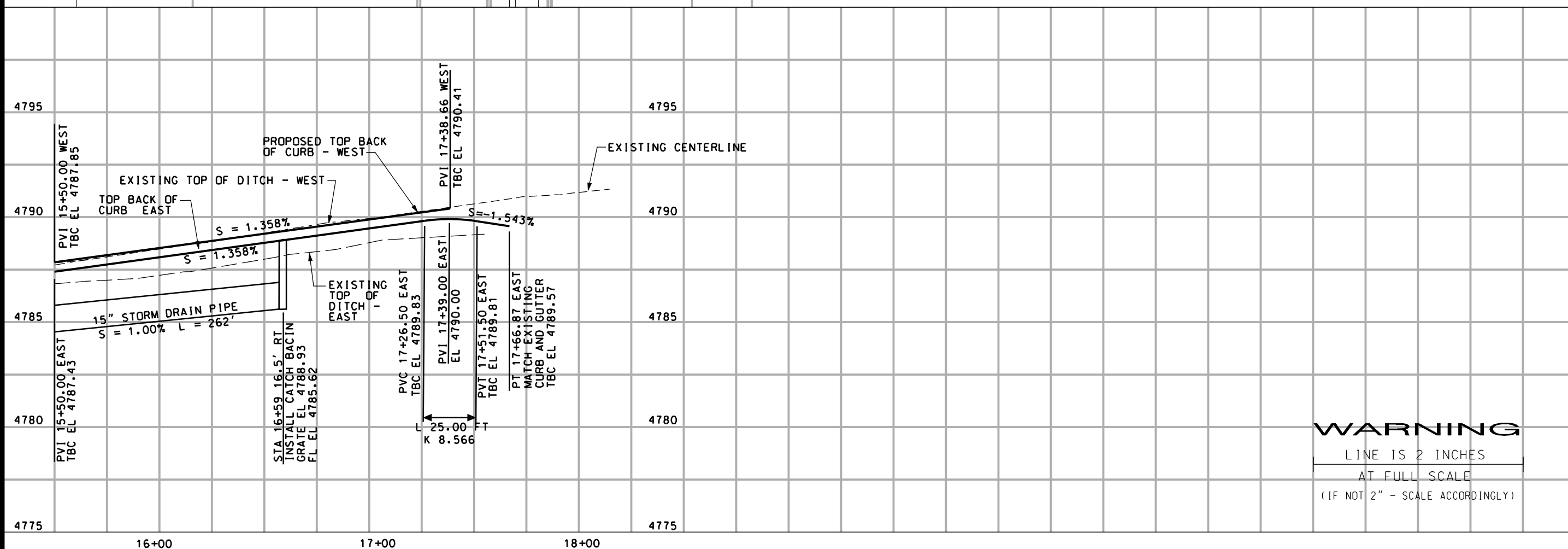
SHEET NO. 2nd-01

1" = 50'
SCALE
DRAWN
CHECKED
APPROVED
DATE
PROJECT NO.
06111.00



NOTES:

1. NEW EAST CURB AND GUTTER - FACE LOCATED AT OUTSIDE TOP OF EXISTING ROCK DITCH. WEST CURB FACE OFFSET 3.4' FROM TOP OUTSIDE EDGE OF DITCH.
2. CONTRACTOR TO STAKE WITH OFFSETS FROM EXISTING ROCK DITCH PRIOR TO REMOVAL.



SCALE	
DRAWN	GP
CHECKED	JFM
APPROVED	RME
DATE	04-05
PROJECT NO.	06111.00

THIS DRAWING IS THE
PROPERTY OF CIVIL
SCIENCE AND IS NOT
TO BE REPRODUCED,
MODIFIED OR USED
FOR ANY OTHER PROJECT
OR EXTENSION OF THIS
PROJECT EXCEPT BY
AGREEMENT WITH SAID
COMPANY.

CIVIL SCIENCE
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
3160 West Clubhouse Drive
Lodi, Utah 84043
(801) 768-7200
FAX (801) 768-7201

UTAH NATIONAL GUARD - CAMP WILLIAMS
SECOND STREET DRAINAGE
FIRST ALTERNATE BID

SECOND STREET
PLAN & PROFILE SHEET

TAH
MUNITY

SHEET NO. 2nd-02

UTAH NATIONAL GUARD – CAMP WILLIAMS

THIRD STREET DRAINAGE 2ND ALTERNATE BID

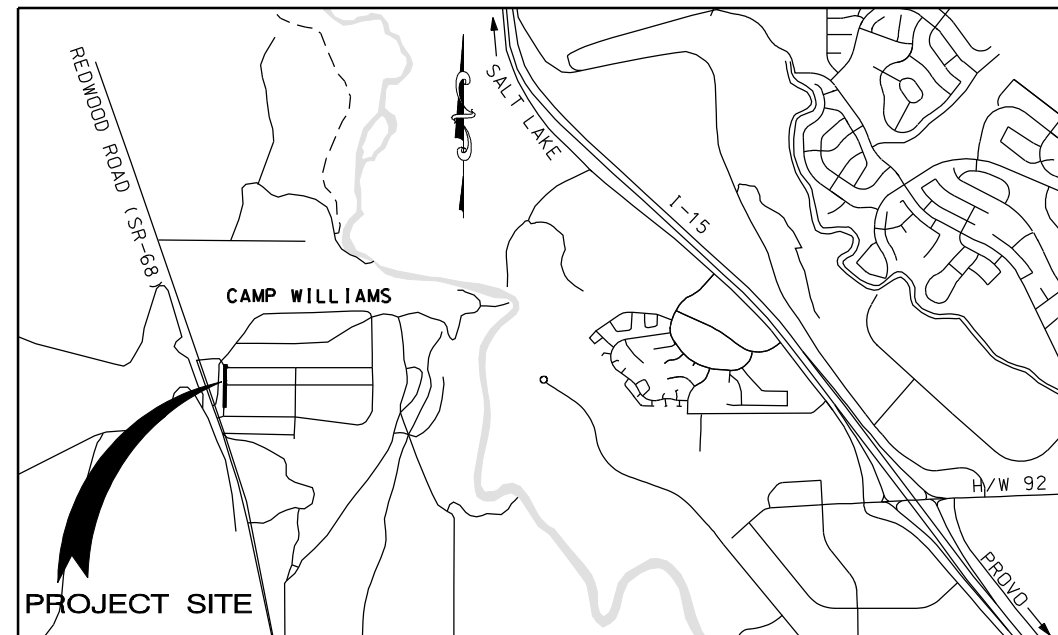
DFCM PROJECT NO. 06194480

APRIL 2007

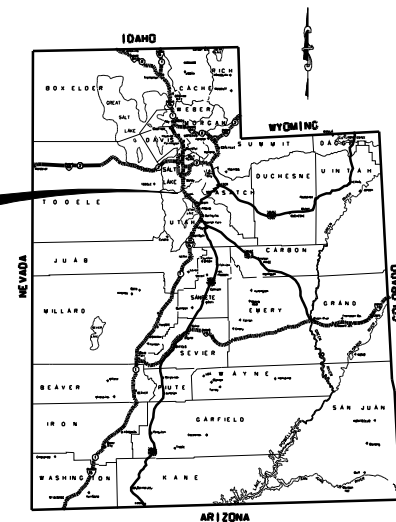
SHEET INDEX

<u>SHEET</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
3rd-01 TO 3rd-02	PLAN AND PROFILE SHEETS
Nev-02	PLAN AND PROFILE SHEET

REFER TO BASE BID SHEETS FOR DETAILS



VICINITY MAP

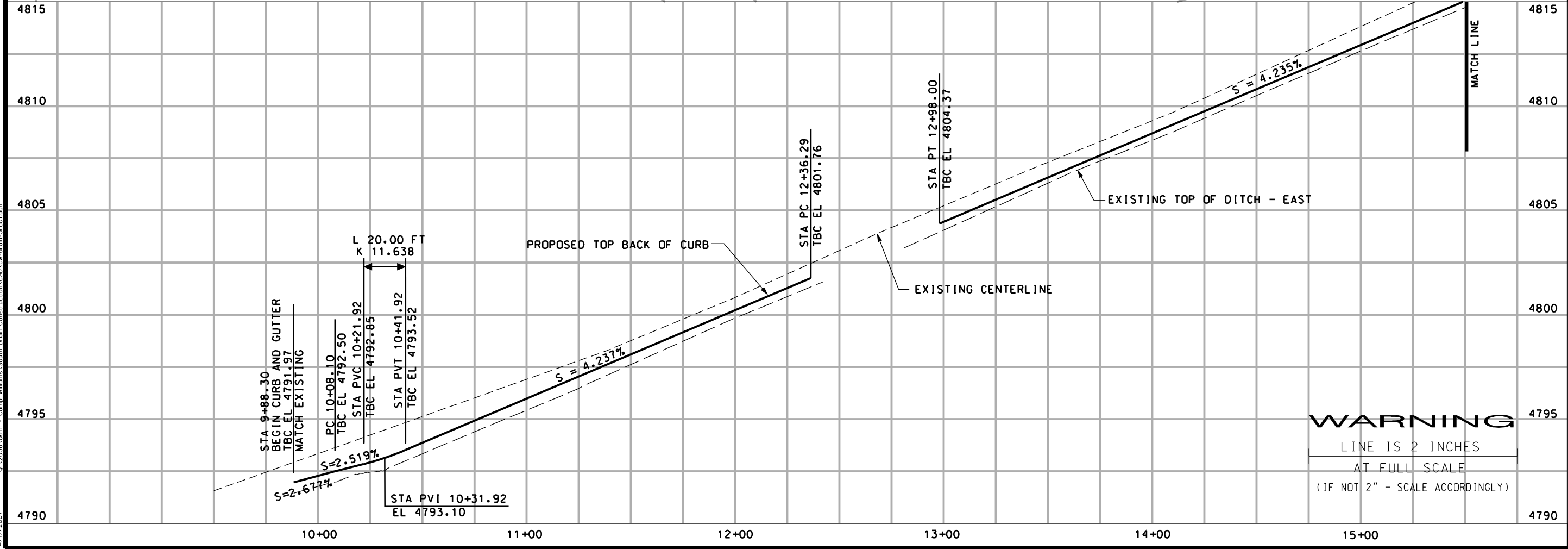
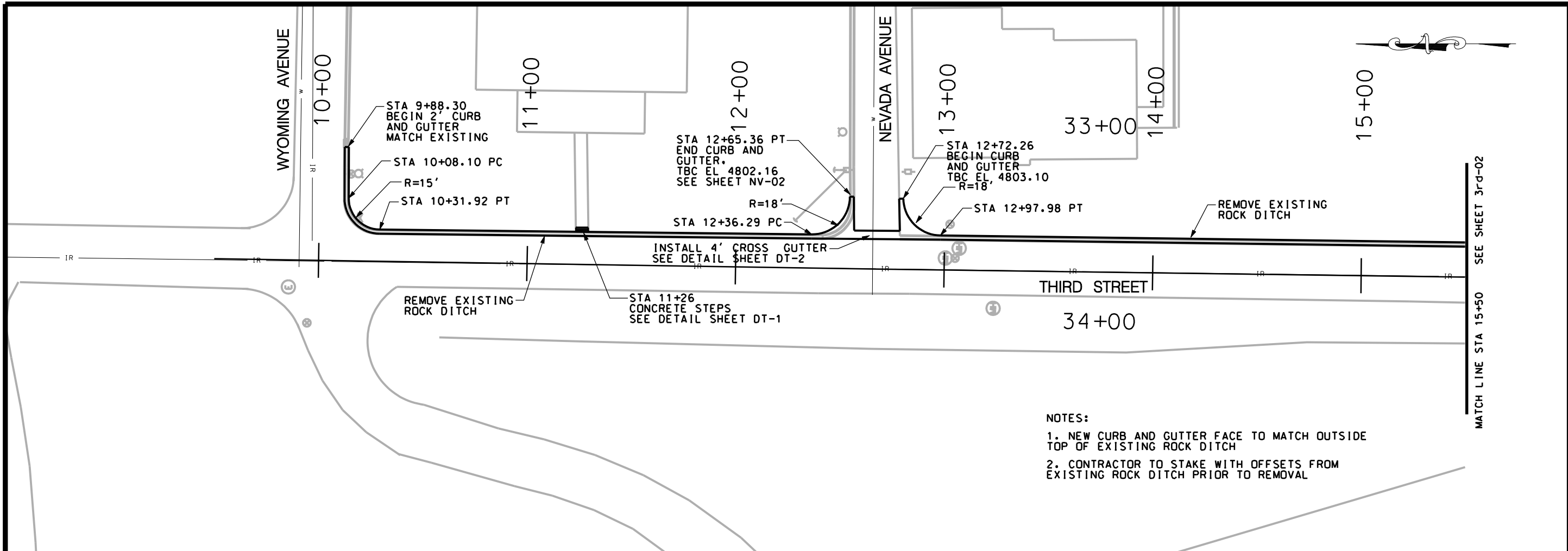


**CIVIL
SCIENCE**

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS

3160 West Clubhouse Drive
Lehi, UT 84043
(801) 768-7200
(801) 768-7201 (FAX)
CONTACT: JAY MEACHAM
PROJECT NO. 06111.00

4/17/2007 G:\2006\06111 - Camp Williams\South Drain Construction\CAD\view-draw-3rd.dgn



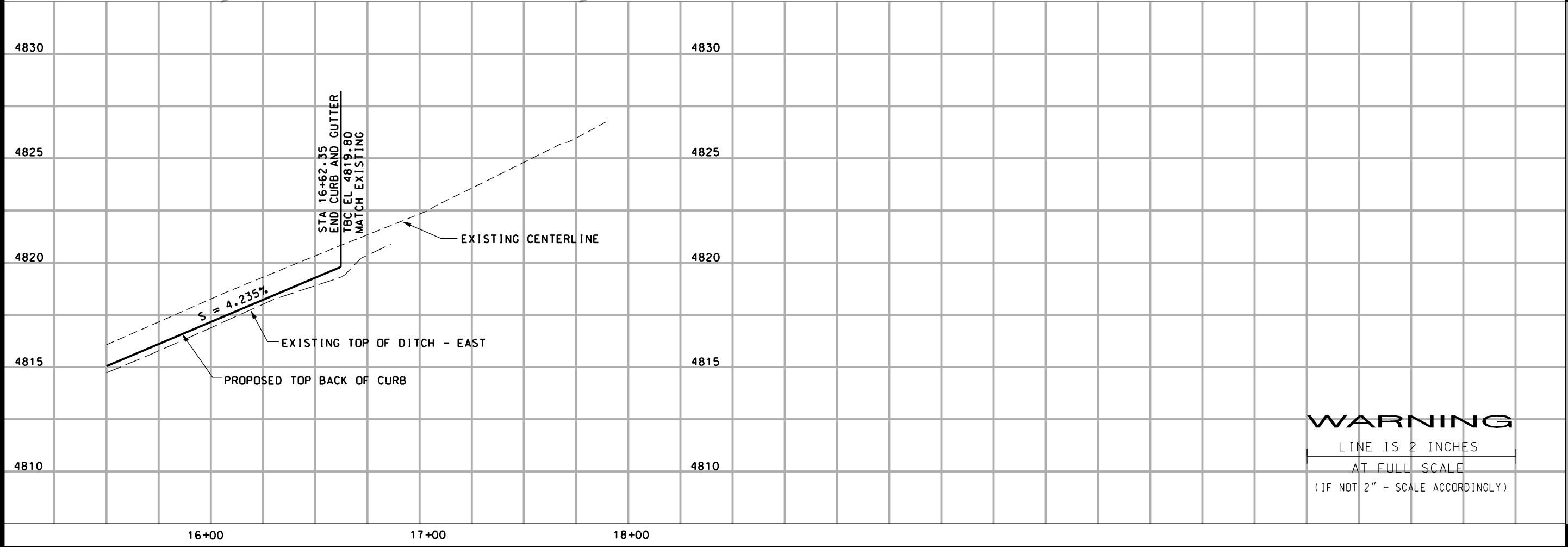
WARNING
LINE IS 2 INCHES
AT FULL SCALE
(IF NOT 2" - SCALE ACCORDINGLY)

<p>1" = 50'</p> <p>SCALE</p> <p>DRAWN</p> <p>CHECKED</p> <p>APPROVED</p> <p>DATE</p> <p>PROJECT NO.</p>	<p>GP</p>	<p>JFM</p>	<p>RME</p>	<p>04-05</p>	<p>06111.00</p>
	<p>THIS DRAWING IS THE PROPERTY OF CIVIL SCIENCE AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AGREEMENT WITH SAID COMPANY.</p>				
	<p>CIVIL SCIENCE</p> <p>ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS</p> <p>3160 West Clubhouse Drive Lehi, Utah 84043 Tel: (801) 768-7201 Fax: (801) 768-7201</p>				
	<p>UTAH NATIONAL GUARD - CAMP WILLIAMS THIRD STREET DRAINAGE 2ND ALTERNATIVE BID</p>				
	<p>THIRD STREET PLAN & PROFILE SHEET</p>				

UTAH
COUNTY

SHEET NO. 3rd-01

4/17/2007 G:\2006\06111 - Camp Williams\South Drain Construction\CAD\view.drain-3rd-02.dgn



WARNING
LINE IS 2 INCHES
AT FULL SCALE
(IF NOT 2" - SCALE ACCORDINGLY)

MATCH LINE STA 15+50 SEE SHEET 3rd-01

THIRD STREET

STA 16+62.35
END CURB AND GUTTER

16+00

17+00

UTAH AVENUE

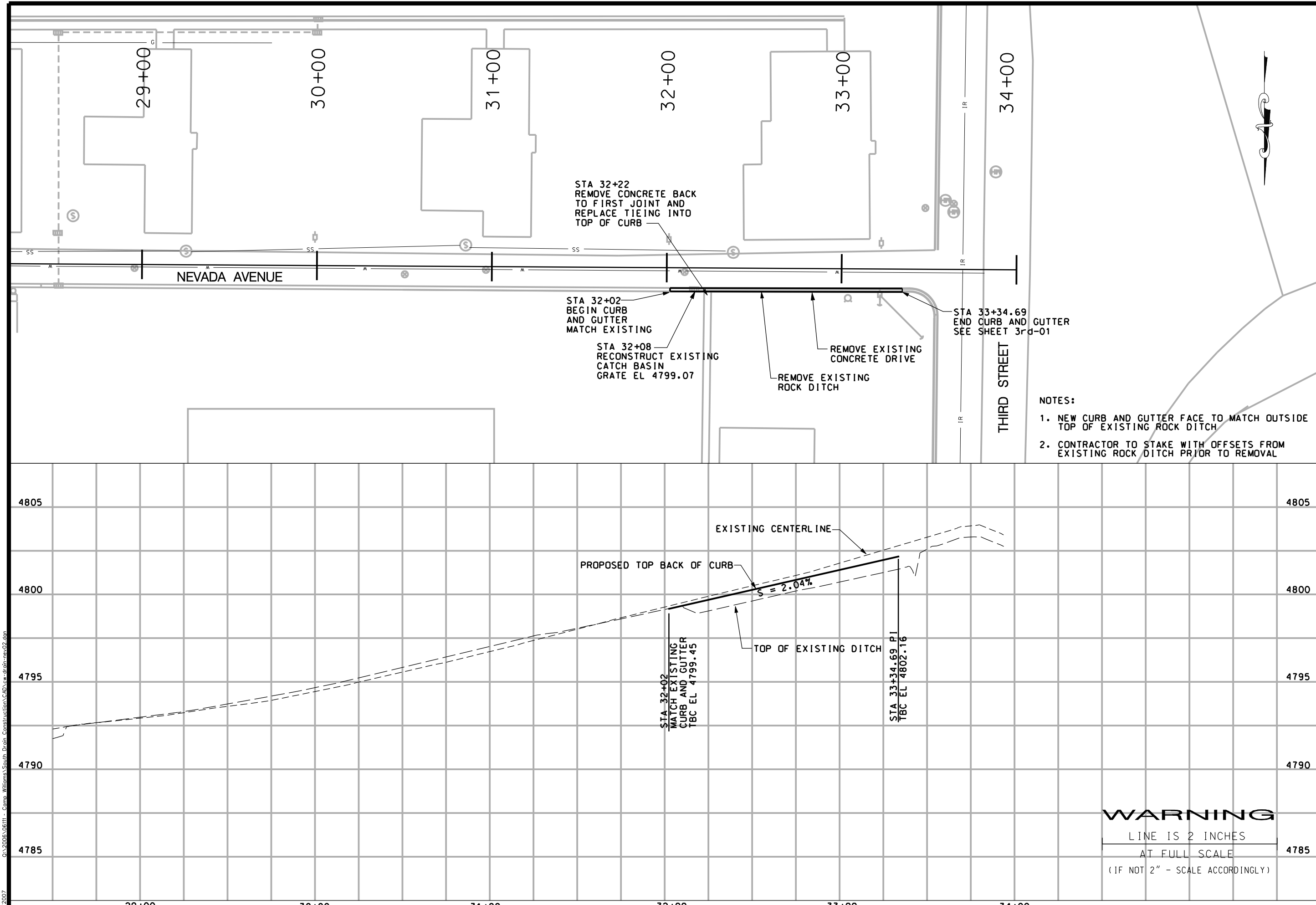
SHEET NO. 3rd-02

UTAH NATIONAL GUARD - CAMP WILLIAMS
THIRD STREET DRAINAGE
2ND ALTERNATIVE BID

CIVIL SCIENCE
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
3160 West Clubhouse Drive
Lehi, Utah 84043
Tel: (801) 768-7200
Fax: (801) 768-7201

THIS DRAWING IS THE
PROPERTY OF CIVIL
SCIENCE AND IS NOT
TO BE REPRODUCED,
COPIED, OR TRANSMITTED
FOR ANY OTHER PROJECT
WITHOUT THE WRITTEN
AGREEMENT OF CIVIL
SCIENCE, INC. THIS
DRAWING IS THE PROPERTY
OF CIVIL SCIENCE, INC.

SCALE	1" = 50'
DRAWN	GP
CHECKED	JFM
APPROVED	RME
DATE	04-05
PROJECT NO.	06111.00



1" = 50'

SCALE

DRWN

CHECKED

APPROVED

DATE

PROJECT NO.

THIS DRAWING IS THE PROPERTY OF CIVIL SCIENCE AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AGREEMENT WITH SAID COMPANY.

CIVIL SCIENCE

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS

3160 West Clubhouse Drive
Lehi, UT 84043
Tel: (801) 768-7201
Fax: (801) 768-7201

UTAH NATIONAL GUARD - CAMP WILLIAMS

THIRD STREET DRAINAGE

2ND ALTERNATIVE BID

NEVADA AVENUE

PLAN & PROFILE SHEET

UTAH

COUNTY

SHEET NO.

NEV-02

4/17/2007 g:\2006\08111 - Camp Williams\South Drain Construction\CAD\new-drain-nev02.dgn